Innovation for Our Energy Future



Join us the second Thursday of every month for a series of "brown bag" seminars, sponsored by the **National Renewable Energy Laboratory and** the U.S. Department of **Energy. Each seminar** is held at NREL's **Washington office with** a videoconference link to Golden, Colorado. Topics focus on new and innovative renewable energy and energy analysis strategies, models, and technologies.



Energy Analysis Seminar Series

A "brown bag" analytical seminar series

Regional Variation in Hydrogen Costs to 2050

Margaret Singh, Transportation Systems Planner Argonne National Laboratory (ANL)

Thursday, July 8, 2004

Noon – 1 p.m. (in Washington, D.C.) 10 – 11 a.m. (videoconference in Golden, Colo.)

Assuming fuel cell vehicles (FCVs) eventually achieve substantial market penetration, the hydrogen (H2) fuel that they use will be produced from a variety of resource fuels and delivered by several methods. The production-delivery pathways used will vary across the United States – in part because of differences in regional resource availability and regional demand (i.e., rural areas may have higher levels of



Margaret Singh

forecourt production). The Department of Energy (DOE) sponsored a study that examined potential regional (U.S. Census Division) differences in resource fuel use and H2 demand, as well as subsequent regional differences in the cost of H2 for FCVs. One impetus for this analysis was interest by the Energy Information Administration (EIA) in refining its single H2 price estimate over time and regions. During this seminar, Margaret Singh will discuss the study and describe how regional variation in H2 demand, production, and cost to 2050 was estimated. She'll also highlight the effects of several key variables on these regional estimates, and what major analytical issues need to be addressed when estimating regional H2 costs.

Margaret Singh is a transportation systems planner with the Center for Transportation Research, Argonne National Laboratory (ANL). For the past 25 years at ANL, she has analyzed the costs and benefits of alternative and reformulated fuels, as well as advanced vehicle technologies for DOE's Policy Office and transportation programs. Among other projects, she is currently responsible for updating and running the VISION model, which estimates the impact of highway vehicle technologies and fuels on energy use and carbon emissions to 2050. Singh, who is a member of the Transportation Research Board's Alternative Fuels Committee, has a B.A. from Northwestern University and a master's in urban planning from the University of Illinois-Champaign.

Golden, Colo., information

1829 Denver West Drive, Golden, Colorado **Building 27, Conference Room 230 A/B**

Please contact Lynne Fenn at lynne_fenn@nrel.gov or 303-384-7439

Washington, D.C., information

901 D Street SW (also the Aerospace Building, 370 L'Enfant Promenade), adjacent to the Forrestal Building

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